Work Order ID 108120

October-07-13 9:11:54 AM

108120

Item ID: D3297-3-0210 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Hose Ass'Y

Start Date: 10/07/13 **Start Qty:** 4.00 *4*

Required Date: 10/07/13 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** MLS **Date:** 13-10-07 **Tooling:** **Date:**

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D3297	Rev D								
100		0.00							
100	PURCHASING								
Purchasing	**Memo**	0.00							
Purchasing	Create D2729-1 label and include with W/O Issue P/O: 21625 Hose Assembly as per Dwg D3297 Possible Supplier: API Material release note is required								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	**Memo**	0.00							
Packaging	Ensure Material Release Note is attached								

CL 13/10/08 (4)

13/10/10 (4)

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Crosstube ☐
- Water Jet ☐
- Engineering ☐
- Machining ☐
- Small Fab ☐
- Prod. Eng. Coor. ☐
- Quality ☐
- Thermoforming ☐
- Finishing ☐
- Rec/Store/Packaging ☐
- Other ☐
- Large Fab ☐
- Composite ☐
- Supplier ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
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- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

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Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- Inspect dimensions to drawing	0.00 DAS 27 9-89				4			
120									
QC	**Memo**	0.00 B1015							
Quality Control									
130		0.00							DF
130	Small Fab					4			13-10-16
Small Fab	**Memo**	0.00							
Small Fab	Install D2729-1 as per Dwg D3297 using D2182-045 Heat Shrink Batch: B 26009		DAS 27 9-89 B1016			4			
QC5									
140	Identify as per dwg & Stock Location: ST192	0.00				4x			DAS 28 9-89 13-10-16
140									
Packaging	**Memo**	0.00							
Packaging									

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

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- Rework ☐
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- Work Order Update ☐

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- Skid-tube ☐
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- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

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- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
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- ☐ Temperature/Cure
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QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	**Memo**	0.00							
Quality Control									

HJ / RM 13/10/21

MF 13-10-21

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

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- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

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- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
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- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Picklist Print

October-07-13 9:11:54 AM

Work Order ID: 108120

Parent Item: D3297-3-0210

Parent Item Name: Hose Ass'Y

Start Date: 10/07/13 **Required Date:** 10/07/13

Start Qty: 4.00 **Required Qty:** 4.00

Comments: IPP: B04.11.09Added Step 5KJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
156005-6D0210 Hose Ass'Y		Purchased	No			110	Each	0.0000	1	4	4	10/3/13	
D2182-045 Heat Shrink 4.5" Long		Manufactured	No	26009		130	Each	0.0000	1	4	4	10-13-16	

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

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DISPOSITION

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- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

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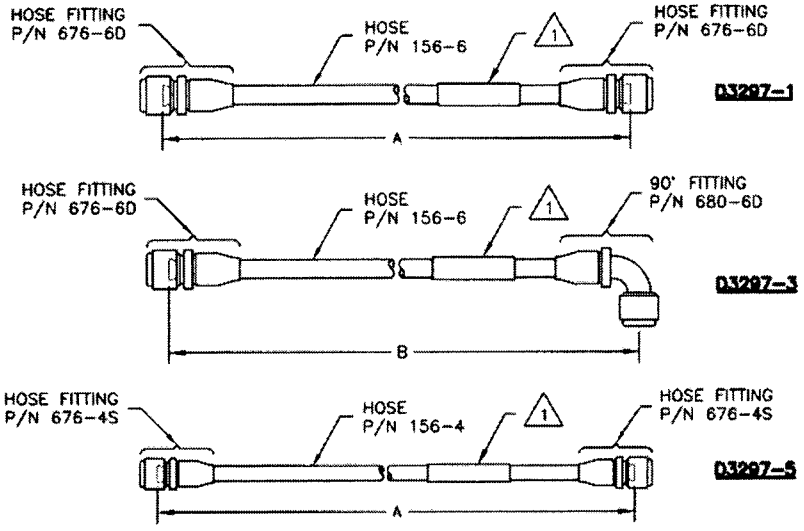
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- ☐ Other

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3297 REV. D SHEET 1 OF 1
DATE 05.01.21		TITLE HOSE ASSEMBLIES SCALE NTS

A	04.07.06	NEW ISSUE
B	04.11.01	STRATOFLEX P/N WAS AEROQUIP P/N
C	04.11.18	T50 CORRECTED TO TSO
D	05.01.21	CORRECT STRATOFLEX P/N

RELEASED 05.01.21



HOSE SPECIFICATION				
DART P/N	STRATOFLEX P/N	VENDOR	A	B
D3297-1-0098	156001-6D0096	API	9.75	
D3297-1-0130	156001-6D0130	API	13.00	
D3297-1-0121	156001-6D0121	API	12.13	
D3297-3-0085	156005-6D0085	API		8.50
D3297-3-0210	156005-6D0210	API		21.00
D3297-3-0350	156005-6D0350	API		35.00
D3297-5-0410	156001-4S0410	API	41.00	

D3297-1-XXXX HOSE ASSEMBLY
D3297-3-XXXX HOSE ASSEMBLY
D3297-5-XXXX HOSE ASSEMBLY
} WHERE XXXX REPRESENTS HOSE LENGTH IN TENTHS OF INCH

EG: 12.125" LONG: D3297-1-0121
41.00" LONG: D3297-5-0410
8.50" LONG: D3297-3-0085

13-10-01 10812 MCS

NOTES:
1) IDENTIFY WITH DART P/N & B/N USING D2729-1 LABEL INSTALLED WITH D2182-045 HEAT SHRINK
2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
3) ALL DIMENSIONS ARE IN INCHES
4) HOSE ASSEMBLIES TO MEET THE REQUIREMENTS OF TSO-C53a TYPE "A"

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DART AEROSPACE

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO21625

Purchase Order Date 10/8/2013
PO Print Date 10/9/2013

Order From : VC-AER002

AEROSPACE PRODUCTS INTERNATIONAL
P.O. BOX 223, STATION M
CALGARY, AB T2P 2H6
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 800 214 7404

Ship To Contact
Ship To Phone
Ship Via: FedEx PI collect
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB Destination-Collect

REVISED $

Line Nbr	Reference / Vendor Part Number / Line Comments / Delivery Comments	Description/ Mfg ID	Req Date/ Taxable / Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	156005-6D0210 AS PER DWG D3297 REV. D B108120	Hose Ass'Y	10/18/2013 Yes 10/18/2013		4.00 Each	$123.85	$495.40

Line Total: $495.40

PO Total: $495.40

Note: Pricing listed above is as per contract agreement between Dart Aerospace and the respective manufacturer.
No substitution or deviation without consent.
Certificate of Conformity or Material Certification required - (YES) NO
PST# 6122-5207

Change Nbr: 2 **Change Date:** 10/9/2013

10/11/2013,13:01:38

Pack List

AEROSPACE PRODUCTS INTERNATIONAL
API
2401 46th Ave.
LACHINE QC H8T 3C9
CANADA

Shipping Address
DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY ON K6A 1K7
CANADA

Forwarding Agent's Address

Shipping Instructions
Detailed Shipping Instructions at the end of the document

Packing Instructions
Detailed Packing Instructions at the end of the document

Information

Document Number	81113208
Document Date	10/11/2013
Purchase Order No.	PO21625
Purchase Order Date	10/09/2013
Sales Order Number	997735
Sales Order Date	10/09/2013
Customer Number	6100481
Shipping Conditions	FXPri 1D (Intl 1-3D)
Incoterms	
Cust Ship Acct	
Delivery Date	10/14/2013
Bill of Lading	
Total Volume	0.004 IN3
Carrier	FedEx

Item	Material	Material Description	Quantity	Weight	Batch Num
10	156005-6D-0210	156-6 HOSE ASSEMBLY			
	Batches				
	0003754422 (PO:4500200555)		4 EA	0 LB	

Shipping and Packing Instructions

****CERTIFICATE OF CONFORMANCE****

I hereby certify that th eaircraft parts described hereon were acquired from a source of supply that is consistent with the conditions under which Transport Canada distributor approval number 77-98 has been granted.

Authorized Signature

AO # 77-98
API # 11

CERTIFICATE OF CONFORMANCE

We hereby certify that all of the above parts, including all materials, have been manufactured, tested, inspected and packed in conformance with all of the requirements of your order and the applicable government specifications & standards. Records of tests, inspection and certification indicating the above conformance are on file at Aerospace Productions International and are available for your examination.

It is further certified that any hose assemblies marked with a TSO, parts and/or materials reflected therein were produced under Federal Aviation Administration approved manufacturing quality control systems/methods as set forth in the FAA issued technical standard order authorized (TSOA) issued to Stratoflex and (b) such parts and/or materials are new and are in condition for safe operation.

If applicable, satisfactory compliance with the conditions are test required for TSO approval indicates the hose assembly has met the minimum performance standards as stated in the TSO. Furthermore, it is the responsibility of the installer to determine the installation eligibility and that it will not cause the hose assembly to be subjected to conditions in excess of those for which it has been approved.

Per API _____